

**ACIDIC PRECIPITATION IN ONTARIO STUDY**

**ANNUAL STATISTICS OF CONCENTRATION -  
CUMULATIVE AMBIENT AIR MONITORING NETWORK, 1983**

**Atmospheric Processes Studies Unit  
Air Quality and Meteorology Section  
Ontario Ministry of the Environment  
Air Resources Branch  
880 Bay Street, 4th Floor  
Toronto, Ontario, Canada  
M5S 1Z8**

**June, 1985  
ARB-089-85-AQM  
API-018-85**

**A.P.I.O.S. Coordination Office  
Ontario Ministry of the Environment  
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Toronto, Ontario, Canada  
M4V 1P5  
Project Co-ordinator: Dr. T. G. Brydges**

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## TABLE OF CONTENTS

PART I	Introduction	Page II
PART II	Station Description and Location Map	III
PART III	Summary Statistics of Observed Concentration by Station	

<u>Station</u>	<u>Map Ref. No.</u>	
Colchester	1	1
Port Stanley	3	4
Wilkesport	4	7
Palmerston	8	10
Shallow Lake	9	13
Milton	10	16
Uxbridge	11	19
Campbellford	13	22
Smith's Falls	15	25
Dalhousie Mills	16	28
Golden Lake	17	31
Dorset	20	34
McKellar	21	37
Mattawa	22	40
Killarney	23	43
Gowganda	25	46
Moonbeam	27	49
Attawapiskat	28	52
Geraldton	30	55
Nakina	30A	58
Dorion	31	61
Ear Falls	35	64
Pickle Lake	36	67
Turkey Lake	37	70

PART IV	Summary Statistics of Observed Concentration by Region	
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Central Region	73
Northeastern Region	76
Northwestern Region	79
Southeastern Region	82
Southwestern Region	85

**PART I**

**INTRODUCTION**

## INTRODUCTION

This report was prepared by David Chung. The statistical summaries presented in this report pertain to the 1983 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) cumulative ambient air monitoring network (see network overview report, #ARB-164-83-ARSP). The relevant data are listed in a previous report, #ARB-88-85-AQM. Any sample of which sampling period is less than 23 days or greater than 33 days is not included in the statistics calculations. All available data are utilized in the calculations except results reported as being unreliable (i.e., results are identified as unreasonable values by using the validation procedures; detailed description of the validation procedure is available from the Ministry upon request) or approximate (i.e., in exact results are reported due to laboratory difficulties, such as that encountered in calibration and that the samples cannot be re-analyzed to confirm the reported values). In a very few cases, concentration levels exceeded the upper limit of the range of the chemical analysis. Rather than using the upper limit, a decision was made to exclude these values from the statistics generated in this report. Results labelled as W are replaced by "zero". W is the level which the analytical technique cannot distinguish from zero. If a level is recorded less than one detection limit T, a value corresponding to one half the detection limit is utilized for statistical calculations as reported in the statistical summaries. In the presented statistics summaries, "Total Sulphur" is calculated by the summation of sulphur of "Sulphur Dioxide" and "Sulphate".

The statistical summaries presented in Parts III to IV include number of samples, mean (arithmetic/geometric), standard deviation (arithmetic/geometric), maximum, minimum, and quartiles. These statistics are for an average sampling period.

**PART II**

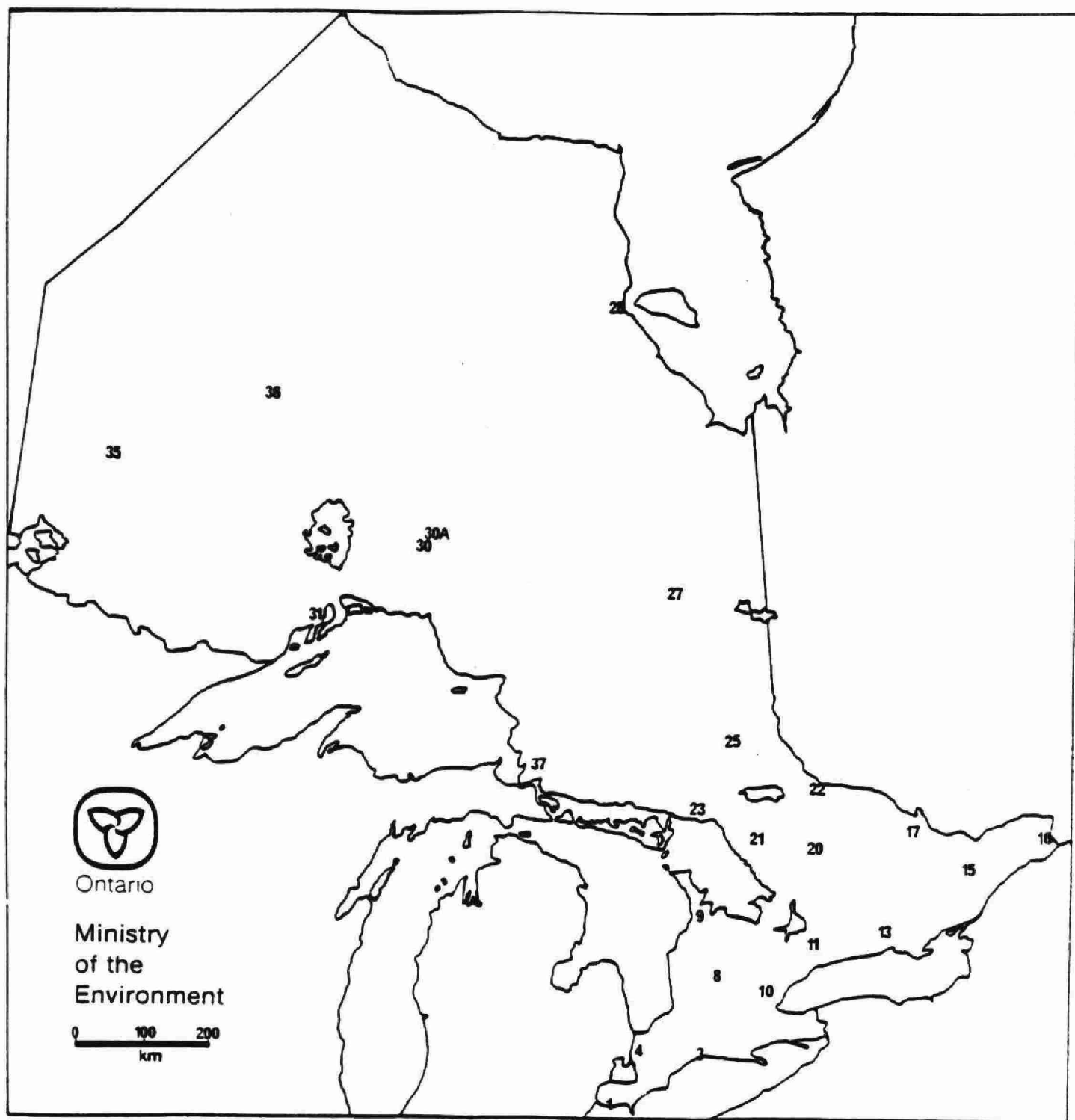
**STATION DESCRIPTION AND LOCATION MAP**

# APIOS CUMULATIVE DRY DEPOSITION NETWORK SITE DESCRIPTIONS

<u>MOE REGION</u>	<u>STATION NAME</u>	<u>ELEVATION</u> (m above MSL)	<u>LATITUDE</u> (North)	<u>LONGITUDE</u> (West)	<u>UTM GRID CO-ORDINANTS</u>	
Southwestern	Colchester	183	41°59'15"	82°55'41"	4650000	340300
	Pt. Stanley	213	42°40'22"	81°09'55"	4724050	486700
	Wilkesport	183	42°42'11"	82°21'13"	4728350	389150
	Shallow Lake	229	44°34'54"	81°05'24"	4936200	492850
	Palmerston	389	43°48'19"	80°54'12"	4850050	507750
Central	Dorset	320	45°13'26"	78°55'52"	5009650	662400
	Milton	221	43°31'05"	79°55'54"	4818600	586350
	Uxbridge	244	44°12'46"	79°12'38"	4896800	643000
	Campbellford	175	44°17'28"	77°47'33"	4907600	277150
Southeastern	Smith's Falls	122	44°56'41"	75°57'48"	4977100	423950
	Dalhousie Mills	69	45°19'00"	74°28'13"	5018100	541550
	Golden Lake	160	45°36'48"	77°12'03"	5053200	328400
Northeastern	McKellar	244	45°30'57"	79°55'19"	5040600	583950
	Killarney	183	45°59'26"	81°29'18"	5092900	462200
	Mattawa	198	46°16'45"	78°49'19"	5127150	667800
	Gowganda	343	47°39'04"	80°46'32"	5277300	516600
	Moonbeam	244	49°19'16"	82°08'46"	5463600	416650
	Turkey Lake	472	47°03'15"	84°24'00"	5214250	696750
	Attawapiskat	9	52°56'00"	82°24'00"	NA	NA
Northwestern	Dorion	244	48°50'33"	88°36'45"	5410800	382150
	Nakina	320	50°10'38"	86°42'40"	5558150	520950
	Geraldton	351	49°48'05"	86°46'00"	5516300	516750
	Ear Falls	350	50°38'31"	93°13'13"	5609800	484150
	Pickle Lake	360	51°27'41"	90°12'04"	5704800	694550

- IV -  
FIGURE 1

LOCATION OF APIOS CUMULATIVE AMBIENT AIR MONITORING NETWORK SITES



- |                 |                   |  |
|-----------------|-------------------|--|
| 1. Colchester   | 13. Campbellford  | 25. Gowganda                                     |
| 3. Pt. Stanley  | 15. Smith's Falls | 27. Moonbeam                                     |
| 4. Wilkesport   | 16. Dalhousie     | 28. Attawapiskat                                 |
| 8. Palmerston   | 17. Golden Lake   | 30. Geraldton (Replacing Nakina,<br>August 1983) |
| 9. Shallow Lake | 20. Dorset        | 30A. Nakina                                      |
| 10. Milton      | 21. Mckellar      | 31. Dorion                                       |
| 11. Uxbridge    | 22. Mattawa       | 35. Ear Falls                                    |
|                 | 23. Killarney     | 36. Pickle Lake                                  |
|                 |                   | 37. Turkey Lake                                  |

**PART III**

**SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY STATION**

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : COLCHESTER/CUMULATIVE/LO-VOL #1

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	12	10	10	11	11	12	12
MAXIMUM :	33.66	10.17	18.32	1.58	0.91	1.05	0.31
MINIMUM :	8.41	1.25	6.32	0.35	0.08	0.34	0.11
RANGE :	25.24	8.92	12.00	1.23	0.83	0.71	0.19
ARITH. MEAN :	14.01	5.83	8.90	1.11	0.58	0.63	0.18
ARITH. STD. DEV :	6.53	2.80	3.47	0.35	0.22	0.22	0.06
GEOM. MEAN :	13.11	5.10	8.48	1.04	0.51	0.60	0.17
GEOM. STD. DEV. :	1.42	1.83	1.35	1.51	1.92	1.42	1.39
1ST QUARTILE :	11.15	4.07	6.82	0.89	0.48	0.48	0.14
2ND QUARTILE :	12.70	4.97	7.95	1.11	0.53	0.58	0.15
3RD QUARTILE :	14.06	7.34	8.77	1.26	0.73	0.81	0.23



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : COLCHESTER/CUMULATIVE/LO-VOL      #1

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	12	12	12	12	12
MAXIMUM :	0.108	0.323	0.159	0.159	0.112	0.012	0.0066
MINIMUM :	0.020	0.034	0.069	0.037	0.039	0.005	0.0016
RANGE :	0.088	0.289	0.089	0.122	0.073	0.008	0.0050
ARITH. MEAN :	0.081	0.158	0.109	0.074	0.080	0.009	0.0031
ARITH. STD. DEV. :	0.024	0.081	0.028	0.033	0.021	0.002	0.0015
GEOM. MEAN :	0.076	0.139	0.106	0.069	0.077	0.009	0.0028
GEOM. STD. DEV. :	1.573	1.777	1.295	1.498	1.357	1.322	1.5517
1ST QUARTILE :	0.073	0.112	0.088	0.049	0.066	0.007	0.0021
2ND QUARTILE :	0.079	0.142	0.113	0.071	0.084	0.009	0.0027
3RD QUARTILE :	0.100	0.196	0.125	0.088	0.096	0.011	0.0039

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : COLCHESTER/CUMULATIVE/LO-VOL      #1

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	12	11
MAXIMUM :	0.00328	0.0025	0.063	0.00117
MINIMUM :	0.00031	0.0006	0.019	0.00021
RANGE :	0.00297	0.0019	0.044	0.00096
ARITH. MEAN :	0.00079	0.0009	0.041	0.00057
ARITH. STD. DEV :	0.00093	0.0006	0.014	0.00029
GEOM. MEAN :	0.00051	0.0008	0.039	0.00050
GEOM. STD. DEV. :	2.35646	1.6062	1.445	1.70970
1ST QUARTILE :	0.00031	0.0006	0.035	0.00028
2ND QUARTILE :	0.00032	0.0006	0.040	0.00054
3RD QUARTILE :	0.00097	0.0007	0.050	0.00072

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PORT STANLEY/CUMULATIVE/LO-VOL #3

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	11	11	12	12	13	13
MAXIMUM :	24.32	9.16	13.54	1.48	0.66	1.00	0.21
MINIMUM :	4.15	3.19	4.47	0.71	0.33	0.29	0.05
RANGE :	20.17	5.97	9.07	0.77	0.33	0.71	0.16
ARITH. MEAN :	10.86	5.59	7.54	1.04	0.49	0.59	0.11
ARITH. STD. DEV :	5.86	1.86	2.82	0.23	0.11	0.21	0.05
GEOM. MEAN :	9.62	5.32	7.14	1.02	0.47	0.55	0.10
GEOM. STD. DEV. :	1.67	1.39	1.40	1.25	1.25	1.43	1.47
1ST QUARTILE :	6.77	3.88	5.43	0.90	0.40	0.42	0.08
2ND QUARTILE :	9.56	5.04	6.86	1.04	0.48	0.53	0.10
3RD QUARTILE :	11.09	6.61	7.85	1.13	0.58	0.70	0.13

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : PORT STANLEY/CUMULATIVE/LO-VOL #3

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	0.108	0.245	0.231	0.153	0.079	0.016	0.0039
MINIMUM :	0.051	0.068	0.061	0.028	0.040	0.007	0.0010
RANGE :	0.057	0.178	0.170	0.125	0.039	0.008	0.0029
ARITH. MEAN :	0.082	0.138	0.117	0.083	0.062	0.010	0.0022
ARITH. STD. DEV :	0.018	0.067	0.044	0.037	0.009	0.002	0.0009
GEOM. MEAN :	0.080	0.125	0.110	0.075	0.062	0.010	0.0021
GEOM. STD. DEV. :	1.261	1.596	1.430	1.593	1.177	1.238	1.5314
1ST QUARTILE :	0.066	0.084	0.091	0.059	0.058	0.009	0.0016
2ND QUARTILE :	0.084	0.109	0.107	0.069	0.063	0.010	0.0020
3RD QUARTILE :	0.091	0.167	0.125	0.095	0.066	0.011	0.0027

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PORT STANLEY/CUMULATIVE/LO-VOL #3

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13
MAXIMUM :	0.00214	0.0027	0.032	0.00072
MINIMUM :	0.00031	0.0006	0.016	0.00023
RANGE :	0.00183	0.0021	0.016	0.00050
ARITH. MEAN :	0.00056	0.0008	0.028	0.00045
ARITH. STD. DEV. :	0.00058	0.0006	0.004	0.00015
GEOM. MEAN :	0.00043	0.0007	0.027	0.00042
GEOM. STD. DEV. :	1.90133	1.4873	1.203	1.42141
1ST QUARTILE :	0.00032	0.0006	0.025	0.00033
2ND QUARTILE :	0.00033	0.0006	0.027	0.00044
3RD QUARTILE :	0.00036	0.0007	0.030	0.00050

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WILKESPORT/CUMULATIVE/LO-VOL #4

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	12	10	10	11	11	12	12
MAXIMUM :	34.00	9.67	16.56	1.60	1.09	2.11	0.33
MINIMUM :	9.86	3.27	7.00	0.73	0.43	0.28	0.04
RANGE :	24.14	6.40	9.56	0.87	0.66	1.82	0.29
ARITH. MEAN :	17.63	5.88	10.23	1.09	0.65	1.10	0.15
ARITH. STD. DEV :	7.84	2.30	3.29	0.27	0.19	0.53	0.08
GEOM. MEAN :	16.29	5.49	9.79	1.06	0.62	0.97	0.13
GEOM. STD. DEV. :	1.50	1.48	1.35	1.27	1.32	1.74	1.71
1ST QUARTILE :	12.30	3.80	7.32	0.85	0.48	0.69	0.10
2ND QUARTILE :	13.85	5.53	8.94	1.05	0.58	0.98	0.13
3RD QUARTILE :	23.65	7.01	11.90	1.18	0.71	1.48	0.21

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : WILKESPORT/CUMULATIVE/LO-VOL #4

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	10	12	12	12	12	12
MAXIMUM :	0.119	0.289	0.230	0.221	0.092	0.014	0.0055
MINIMUM :	0.044	0.085	0.058	0.035	0.043	0.005	0.0016
RANGE :	0.075	0.205	0.171	0.186	0.049	0.010	0.0038
ARITH. MEAN :	0.079	0.153	0.111	0.090	0.069	0.009	0.0027
ARITH. STD. DEV :	0.024	0.072	0.048	0.057	0.015	0.003	0.0011
GEOM. MEAN :	0.075	0.141	0.103	0.077	0.068	0.009	0.0026
GEOM. STD. DEV. :	1.366	1.524	1.507	1.748	1.249	1.430	1.4182
1ST QUARTILE :	0.059	0.104	0.074	0.056	0.058	0.007	0.0021
2ND QUARTILE :	0.078	0.123	0.108	0.070	0.068	0.008	0.0024
3RD QUARTILE :	0.092	0.170	0.132	0.110	0.081	0.011	0.0031

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : WILKESPORT/CUMULATIVE/LO-VOL #4

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	12	12
MAXIMUM :	0.00151	0.0031	0.055	0.00094
MINIMUM :	0.00028	0.0006	0.015	0.00017
RANGE :	0.00123	0.0026	0.040	0.00077
ARITH. MEAN :	0.00049	0.0012	0.035	0.00046
ARITH. STD. DEV :	0.00038	0.0009	0.011	0.00022
GEOM. MEAN :	0.00041	0.0010	0.033	0.00041
GEOM. STD. DEV. :	1.69901	1.8594	1.423	1.61265
1ST QUARTILE :	0.00031	0.0006	0.027	0.00028
2ND QUARTILE :	0.00033	0.0007	0.037	0.00045
3RD QUARTILE :	0.00039	0.0017	0.040	0.00056



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PALMERSTON/CUMULATIVE/LO-VOL      #8

PERIOD OF REPORT : JAN 4,83 TO DEC 6,83

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	10	9	9	9	9	10	10
MAXIMUM :	12.77	8.62	8.05	1.29	0.55	1.17	0.44
MINIMUM :	3.06	2.72	3.04	0.50	0.23	0.37	0.09
RANGE :	9.71	5.90	5.01	0.79	0.32	0.80	0.34
ARITH. MEAN :	5.88	5.45	4.62	0.88	0.40	0.70	0.24
ARITH. STD. DEV. :	3.52	1.92	1.88	0.23	0.10	0.28	0.12
GEOM. MEAN :	5.12	5.13	4.34	0.85	0.39	0.65	0.21
GEOM. STD. DEV. :	1.70	1.45	1.43	1.31	1.31	1.52	1.69
1ST QUARTILE :	3.31	3.80	3.29	0.72	0.35	0.40	0.13
2ND QUARTILE :	4.23	5.17	3.59	0.85	0.37	0.66	0.22
3RD QUARTILE :	6.74	5.98	4.62	0.97	0.45	0.88	0.31

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : PALMERSTON/CUMULATIVE/LO-VOL #8

PERIOD OF REPORT : JAN 4,83 TO DEC 6,83

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	10	9	10	10	10	10	10
MAXIMUM :	0.097	0.202	0.106	0.114	0.070	0.010	0.0030
MINIMUM :	0.036	0.055	0.038	0.015	0.040	0.004	0.0010
RANGE :	0.062	0.147	0.068	0.099	0.031	0.006	0.0020
ARITH. MEAN :	0.062	0.111	0.071	0.050	0.054	0.006	0.0021
ARITH. STD. DEV :	0.019	0.055	0.024	0.031	0.011	0.002	0.0007
GEOM. MEAN :	0.059	0.101	0.068	0.042	0.052	0.006	0.0020
GEOM. STD. DEV. :	1.354	1.594	1.415	1.910	1.247	1.402	1.4688
1ST QUARTILE :	0.046	0.066	0.048	0.023	0.040	0.004	0.0014
2ND QUARTILE :	0.057	0.094	0.069	0.043	0.056	0.006	0.0024
3RD QUARTILE :	0.075	0.112	0.085	0.057	0.062	0.007	0.0026

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PALMERSTON/CUMULATIVE/LO-VOL      #8

PERIOD OF REPORT : JAN 4,83 TO DEC 6,83

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	10	10	10	10
MAXIMUM :	0.00193	0.0020	0.028	0.00052
MINIMUM :	0.00032	0.0006	0.013	0.00004
RANGE :	0.00161	0.0014	0.015	0.00049
ARITH. MEAN :	0.00086	0.0008	0.020	0.00030
ARITH. STD. DEV :	0.00064	0.0004	0.005	0.00013
GEOM. MEAN :	0.00066	0.0008	0.019	0.00025
GEOM. STD. DEV. :	2.12666	1.4172	1.312	2.11004
1ST QUARTILE :	0.00033	0.0006	0.014	0.00023
2ND QUARTILE :	0.00066	0.0007	0.021	0.00029
3RD QUARTILE :	0.00104	0.0007	0.023	0.00037

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SHALLOW LAKE/CUMULATIVE/LO-VOL #9

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	12	12	12	12	13	13
MAXIMUM :	16.91	8.59	9.37	1.01	0.46	0.78	0.22
MINIMUM :	2.01	2.28	1.77	0.32	0.14	0.06	0.02
RANGE :	14.90	6.31	7.61	0.69	0.32	0.72	0.20
ARITH. MEAN :	5.38	4.51	4.20	0.64	0.30	0.37	0.10
ARITH. STD. DEV :	4.33	1.89	2.19	0.19	0.09	0.22	0.07
GEOM. MEAN :	4.40	4.17	3.79	0.61	0.29	0.30	0.08
GEOM. STD. DEV. :	1.83	1.51	1.58	1.38	1.37	2.12	2.31
1ST QUARTILE :	2.95	3.10	2.92	0.57	0.26	0.18	0.04
2ND QUARTILE :	3.68	4.24	3.46	0.65	0.28	0.33	0.08
3RD QUARTILE :	4.94	5.38	4.68	0.71	0.35	0.48	0.14

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SHALLOW LAKE/CUMULATIVE/LO-VOL #9

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	11	13	13	13	13	13
MAXIMUM :	0.117	0.176	0.100	0.119	0.062	0.010	0.0024
MINIMUM :	0.035	0.048	0.023	0.017	0.017	0.002	0.0003
RANGE :	0.082	0.128	0.077	0.103	0.044	0.009	0.0021
ARITH. MEAN :	0.058	0.107	0.060	0.046	0.038	0.005	0.0016
ARITH. STD. DEV :	0.021	0.042	0.022	0.028	0.012	0.002	0.0007
GEOM. MEAN :	0.055	0.099	0.056	0.039	0.037	0.005	0.0014
GEOM. STD. DEV. :	1.374	1.498	1.484	1.826	1.381	1.657	1.9899
1ST QUARTILE :	0.046	0.072	0.042	0.023	0.033	0.003	0.0012
2ND QUARTILE :	0.050	0.091	0.056	0.038	0.036	0.005	0.0016
3RD QUARTILE :	0.061	0.137	0.068	0.059	0.042	0.007	0.0021

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SHALLOW LAKE/CUMULATIVE/LO-VOL #9

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	12
MAXIMUM :	0.00457	0.0010	0.024	0.00038
MINIMUM :	0.00026	0.0005	0.008	0.00017
RANGE :	0.00431	0.0005	0.016	0.00021
ARITH. MEAN :	0.00086	0.0007	0.014	0.00028
ARITH. STD. DEV :	0.00124	0.0001	0.004	0.00007
GEOM. MEAN :	0.00051	0.0007	0.013	0.00027
GEOM. STD. DEV. :	2.45448	1.1598	1.296	1.28944
1ST QUARTILE :	0.00031	0.0006	0.012	0.00024
2ND QUARTILE :	0.00033	0.0006	0.013	0.00030
3RD QUARTILE :	0.00042	0.0007	0.014	0.00033

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE/LO-VOL

#10

PERIOD OF REPORT : JAN 5,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	12	11	11	12	13	12	9
MAXIMUM :	21.83	9.45	12.17	1.19	1.24	2.86	0.52
MINIMUM :	3.29	1.72	3.61	0.46	0.23	0.15	0.04
RANGE :	18.54	7.73	8.56	0.73	1.01	2.71	0.48
ARITH. MEAN :	8.74	5.10	6.27	0.84	0.62	1.19	0.30
ARITH. STD. DEV :	5.43	2.07	2.71	0.21	0.29	0.75	0.19
GEOM. MEAN :	7.51	4.69	5.81	0.81	0.56	0.94	0.23
GEOM. STD. DEV. :	1.75	1.57	1.49	1.31	1.58	2.24	2.45
1ST QUARTILE :	5.08	3.61	4.14	0.75	0.43	0.66	0.12
2ND QUARTILE :	6.37	4.82	4.86	0.83	0.51	1.13	0.24
3RD QUARTILE :	11.43	5.85	8.24	0.95	0.63	1.49	0.44

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE/LO-VOL

#10

PERIOD OF REPORT : JAN 5,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	7	12	12	12	12	12
MAXIMUM :	0.156	0.189	0.248	0.171	0.189	0.028	0.0046
MINIMUM :	0.023	0.084	0.064	0.037	0.052	0.007	0.0017
RANGE :	0.133	0.105	0.184	0.134	0.137	0.020	0.0029
ARITH. MEAN :	0.081	0.117	0.152	0.076	0.140	0.016	0.0030
ARITH. STD. DEV :	0.038	0.040	0.059	0.037	0.036	0.006	0.0010
GEOM. MEAN :	0.071	0.112	0.141	0.070	0.134	0.015	0.0029
GEOM. STD. DEV. :	1.747	1.366	1.539	1.540	1.404	1.449	1.4418
1ST QUARTILE :	0.047	0.085	0.103	0.051	0.129	0.011	0.0019
2ND QUARTILE :	0.084	0.095	0.157	0.065	0.151	0.016	0.0032
3RD QUARTILE :	0.103	0.136	0.199	0.094	0.155	0.019	0.0039



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MILTON/CUMULATIVE/LO-VOL                      #10

PERIOD OF REPORT : JAN 5,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	12	12
MAXIMUM :	0.00252	0.0019	0.085	0.00123
MINIMUM :	0.00029	0.0006	0.013	0.00024
RANGE :	0.00223	0.0014	0.071	0.00099
ARITH. MEAN :	0.00078	0.0011	0.042	0.00057
ARITH. STD. DEV :	0.00076	0.0005	0.019	0.00026
GEOM. MEAN :	0.00056	0.0010	0.038	0.00052
GEOM. STD. DEV. :	2.20961	1.5835	1.635	1.54873
1ST QUARTILE :	0.00032	0.0007	0.026	0.00039
2ND QUARTILE :	0.00033	0.0009	0.041	0.00056
3RD QUARTILE :	0.00099	0.0016	0.051	0.00066

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : UXBRIDGE/CUMULATIVE/LO-VOL      #11

PERIOD OF REPORT : JAN 3,83 TO JAN 2,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	13	13	13	13	12	12
MAXIMUM :	16.52	11.22	9.39	1.08	0.81	2.73	0.15
MINIMUM :	1.83	2.01	1.59	0.32	0.21	0.20	0.02
RANGE :	14.69	9.21	7.81	0.76	0.59	2.53	0.14
ARITH. MEAN :	6.46	4.69	4.80	0.63	0.39	1.14	0.08
ARITH. STD. DEV :	5.29	2.46	2.66	0.22	0.18	0.79	0.05
GEOM. MEAN :	4.86	4.24	4.13	0.60	0.36	0.88	0.07
GEOM. STD. DEV. :	2.16	1.58	1.78	1.44	1.53	2.22	1.99
1ST QUARTILE :	2.33	2.97	2.58	0.52	0.24	0.52	0.04
2ND QUARTILE :	3.98	3.89	3.96	0.55	0.34	0.80	0.07
3RD QUARTILE :	7.39	4.89	5.88	0.68	0.40	1.74	0.12

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : UXBRIDGE/CUMULATIVE/LO-VOL      #11

PERIOD OF REPORT : JAN 3,83 TO JAN 2,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	12	13	13	13	13	12
MAXIMUM :	0.286	0.309	0.132	0.177	0.069	0.022	0.0038
MINIMUM :	0.027	0.068	0.044	0.028	0.031	0.001	0.0003
RANGE :	0.260	0.241	0.088	0.149	0.038	0.020	0.0035
ARITH. MEAN :	0.091	0.152	0.074	0.062	0.051	0.008	0.0022
ARITH. STD. DEV. :	0.078	0.075	0.028	0.042	0.011	0.005	0.0010
GEOM. MEAN :	0.073	0.138	0.070	0.052	0.049	0.006	0.0019
GEOM. STD. DEV. :	1.917	1.560	1.444	1.766	1.260	2.016	1.9447
1ST QUARTILE :	0.049	0.110	0.052	0.029	0.044	0.004	0.0017
2ND QUARTILE :	0.066	0.126	0.059	0.047	0.047	0.006	0.0022
3RD QUARTILE :	0.078	0.183	0.094	0.067	0.058	0.010	0.0029

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : UXBRIDGE/CUMULATIVE/LO-VOL      #11

PERIOD OF REPORT : JAN 3,83 TO JAN 2,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	13	13	13
MAXIMUM :	0.00172	0.0028	0.062	0.00066
MINIMUM :	0.00031	0.0006	0.009	0.00003
RANGE :	0.00141	0.0021	0.053	0.00062
ARITH. MEAN :	0.00048	0.0010	0.022	0.00035
ARITH. STD. DEV :	0.00040	0.0007	0.014	0.00019
GEOM. MEAN :	0.00041	0.0008	0.020	0.00027
GEOM. STD. DEV. :	1.61266	1.6191	1.654	2.50616
1ST QUARTILE :	0.00033	0.0007	0.014	0.00024
2ND QUARTILE :	0.00034	0.0007	0.019	0.00036
3RD QUARTILE :	0.00040	0.0007	0.023	0.00044

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE/LO-VOL #13

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	11	11	12	12	13	13
MAXIMUM :	16.45	8.43	9.23	0.72	0.53	3.85	0.18
MINIMUM :	1.18	2.17	1.31	0.29	0.14	0.31	0.01
RANGE :	15.27	6.27	7.92	0.43	0.39	3.54	0.16
ARITH. MEAN :	4.76	3.85	3.68	0.56	0.30	1.40	0.07
ARITH. STD. DEV :	4.10	1.74	2.25	0.14	0.14	1.08	0.05
GEOM. MEAN :	3.76	3.59	3.21	0.54	0.27	1.06	0.06
GEOM. STD. DEV. :	1.97	1.45	1.70	1.31	1.56	2.17	2.03
1ST QUARTILE :	2.47	2.75	2.23	0.49	0.20	0.56	0.04
2ND QUARTILE :	3.46	3.16	2.95	0.55	0.25	0.91	0.05
3RD QUARTILE :	4.16	4.30	3.74	0.68	0.39	1.89	0.10

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE/LO-VOL #13

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	12	13	13	13	13	13
MAXIMUM :	0.467	0.320	0.182	0.336	0.073	0.012	0.0045
MINIMUM :	0.039	0.056	0.029	0.019	0.037	0.002	0.0004
RANGE :	0.428	0.265	0.153	0.317	0.036	0.010	0.0041
ARITH. MEAN :	0.101	0.148	0.082	0.075	0.052	0.007	0.0019
ARITH. STD. DEV :	0.112	0.097	0.046	0.085	0.013	0.003	0.0010
GEOM. MEAN :	0.078	0.122	0.071	0.053	0.050	0.006	0.0016
GEOM. STD. DEV. :	1.870	1.891	1.745	2.192	1.264	1.648	1.7675
1ST QUARTILE :	0.055	0.074	0.049	0.028	0.044	0.004	0.0013
2ND QUARTILE :	0.070	0.113	0.078	0.042	0.045	0.005	0.0015
3RD QUARTILE :	0.083	0.231	0.086	0.074	0.058	0.009	0.0022

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CAMPBELLFORD/CUMULATIVE/LO-VOL #13

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13
MAXIMUM :	0.00137	0.0031	0.021	0.00046
MINIMUM :	0.00026	0.0005	0.010	0.00006
RANGE :	0.00111	0.0026	0.011	0.00040
ARITH. MEAN :	0.00054	0.0014	0.014	0.00030
ARITH. STD. DEV :	0.00035	0.0010	0.003	0.00009
GEOM. MEAN :	0.00046	0.0011	0.014	0.00028
GEOM. STD. DEV. :	1.76075	2.0729	1.221	1.62705
1ST QUARTILE :	0.00028	0.0005	0.012	0.00026
2ND QUARTILE :	0.00037	0.0008	0.014	0.00031
3RD QUARTILE :	0.00060	0.0021	0.015	0.00033

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE/LO-VOL #15

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	12	11	11	12	11	8	8
MAXIMUM :	12.49	7.92	7.22	0.72	0.74	1.31	0.55
MINIMUM :	0.90	2.06	1.19	0.23	0.14	0.28	0.09
RANGE :	11.59	5.86	6.03	0.48	0.59	1.03	0.45
ARITH. MEAN :	4.04	3.36	3.23	0.50	0.36	0.62	0.26
ARITH. STD. DEV :	3.60	1.58	1.94	0.16	0.22	0.41	0.18
GEOM. MEAN :	2.95	3.14	2.77	0.47	0.31	0.52	0.20
GEOM. STD. DEV. :	2.26	1.42	1.78	1.43	1.76	1.84	2.07
1ST QUARTILE :	1.87	2.46	1.62	0.37	0.19	0.30	0.10
2ND QUARTILE :	2.63	2.95	2.54	0.51	0.27	0.48	0.19
3RD QUARTILE :	4.94	3.34	3.91	0.63	0.50	0.90	0.41



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE/LO-VOL #15

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	11	11	11	11	11
MAXIMUM :	0.112	0.545	0.200	0.181	0.094	0.024	0.0038
MINIMUM :	0.022	0.052	0.037	0.025	0.019	0.005	0.0003
RANGE :	0.090	0.493	0.162	0.156	0.075	0.019	0.0035
ARITH. MEAN :	0.070	0.215	0.079	0.057	0.058	0.014	0.0021
ARITH. STD. DEV :	0.026	0.179	0.050	0.047	0.021	0.007	0.0010
GEOM. MEAN :	0.065	0.159	0.068	0.046	0.053	0.013	0.0018
GEOM. STD. DEV. :	1.564	2.223	1.673	1.893	1.559	1.669	2.0517
1ST QUARTILE :	0.052	0.097	0.043	0.027	0.038	0.008	0.0012
2ND QUARTILE :	0.066	0.131	0.059	0.035	0.058	0.012	0.0018
3RD QUARTILE :	0.088	0.352	0.074	0.068	0.068	0.021	0.0030

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SMITH'S FALLS/CUMULATIVE/LO-VOL #15

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	11	11
MAXIMUM :	0.00202	0.0065	0.038	0.00053
MINIMUM :	0.00022	0.0004	0.007	0.00002
RANGE :	0.00180	0.0061	0.030	0.00051
ARITH. MEAN :	0.00059	0.0022	0.020	0.00030
ARITH. STD. DEV :	0.00057	0.0022	0.010	0.00014
GEOM. MEAN :	0.00043	0.0012	0.018	0.00024
GEOM. STD. DEV. :	2.21520	3.1142	1.706	2.35379
1ST QUARTILE :	0.00024	0.0005	0.010	0.00019
2ND QUARTILE :	0.00027	0.0005	0.017	0.00028
3RD QUARTILE :	0.00087	0.0041	0.026	0.00040

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DALHOUSIE MILLS/CUMULATIVE/LO-VOL #16

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIUM UG/M**3
# OF SAMPLES :	13	13	13	13	12	13	13
MAXIMUM :	14.91	8.41	9.45	1.04	1.49	1.48	0.30
MINIMUM :	1.64	2.23	1.66	0.12	0.15	0.12	0.03
RANGE :	13.27	6.17	7.80	0.92	1.34	1.36	0.27
ARITH. MEAN :	5.20	4.46	4.09	0.56	0.57	0.73	0.10
ARITH. STD. DEV. :	4.56	1.95	2.51	0.27	0.46	0.40	0.07
GEOM. MEAN :	3.85	4.13	3.49	0.50	0.44	0.60	0.08
GEOM. STD. DEV. :	2.17	1.49	1.78	1.76	2.08	2.12	1.76
1ST QUARTILE :	1.90	3.16	2.10	0.39	0.28	0.50	0.06
2ND QUARTILE :	2.77	3.70	2.79	0.47	0.32	0.68	0.08
3RD QUARTILE :	4.97	4.44	4.62	0.65	0.86	0.91	0.10

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DALHOUSIE MILLS/CUMULATIVE/LO-VOL #16

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	11	13	13	13	13	12	13
MAXIMUM :	0.223	1.048	0.191	0.138	0.139	0.024	0.0049
MINIMUM :	0.044	0.041	0.028	0.030	0.014	0.004	0.0012
RANGE :	0.179	1.007	0.164	0.108	0.125	0.021	0.0037
ARITH. MEAN :	0.103	0.336	0.094	0.071	0.072	0.014	0.0027
ARITH. STD. DEV :	0.055	0.347	0.046	0.034	0.028	0.006	0.0011
GEOM. MEAN :	0.092	0.209	0.084	0.064	0.065	0.013	0.0025
GEOM. STD. DEV. :	1.645	2.756	1.675	1.615	1.711	1.735	1.5027
1ST QUARTILE :	0.062	0.098	0.064	0.045	0.059	0.010	0.0018
2ND QUARTILE :	0.078	0.167	0.081	0.056	0.075	0.015	0.0026
3RD QUARTILE :	0.132	0.372	0.111	0.089	0.079	0.018	0.0031

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : DALHOUSIE MILLS/CUMULATIVE/LO-VOL #16

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13
MAXIMUM :	0.00447	0.0162	0.052	0.00089
MINIMUM :	0.00025	0.0005	0.005	0.00003
RANGE :	0.00422	0.0157	0.047	0.00086
ARITH. MEAN :	0.00131	0.0057	0.027	0.00044
ARITH. STD. DEV :	0.00159	0.0057	0.012	0.00021
GEOM. MEAN :	0.00072	0.0029	0.024	0.00036
GEOM. STD. DEV. :	2.92626	3.7946	1.808	2.31831
1ST QUARTILE :	0.00032	0.0007	0.022	0.00029
2ND QUARTILE :	0.00039	0.0032	0.025	0.00044
3RD QUARTILE :	0.00103	0.0082	0.030	0.00054

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOLDEN LAKE/CUMULATIVE/LO-VOL #17

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	12	12	12	12	12	12
MAXIMUM :	8.97	6.12	5.21	0.57	0.32	0.23	0.07
MINIMUM :	0.68	1.57	1.11	0.13	0.04	0.03	0.02
RANGE :	8.29	4.55	4.09	0.44	0.28	0.20	0.04
ARITH. MEAN :	2.87	3.16	2.50	0.29	0.18	0.13	0.04
ARITH. STD. DEV :	2.47	1.42	1.26	0.14	0.09	0.06	0.01
GEOM. MEAN :	2.20	2.93	2.25	0.26	0.15	0.12	0.04
GEOM. STD. DEV. :	2.08	1.49	1.60	1.61	1.91	1.85	1.45
1ST QUARTILE :	1.29	2.22	1.54	0.18	0.10	0.08	0.03
2ND QUARTILE :	1.71	2.80	2.28	0.25	0.17	0.16	0.04
3RD QUARTILE :	2.83	3.36	2.81	0.39	0.25	0.18	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOLDEN LAKE/CUMULATIVE/LO-VOL      #17

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	12	12	12	12	12
MAXIMUM :	0.098	0.276	0.138	0.090	0.051	0.009	0.0045
MINIMUM :	0.040	0.047	0.019	0.010	0.020	0.002	0.0003
RANGE :	0.058	0.229	0.119	0.080	0.031	0.008	0.0042
ARITH. MEAN :	0.060	0.128	0.053	0.038	0.034	0.005	0.0019
ARITH. STD. DEV :	0.016	0.074	0.032	0.029	0.010	0.002	0.0012
GEOM. MEAN :	0.058	0.110	0.047	0.029	0.032	0.004	0.0016
GEOM. STD. DEV. :	1.278	1.755	1.708	2.163	1.371	1.602	1.9602
1ST QUARTILE :	0.049	0.069	0.035	0.014	0.026	0.003	0.0012
2ND QUARTILE :	0.056	0.093	0.047	0.027	0.033	0.004	0.0015
3RD QUARTILE :	0.067	0.158	0.065	0.061	0.042	0.005	0.0023

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOLDEN LAKE/CUMULATIVE/LO-VOL #17

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	11	12	12	12
MAXIMUM :	0.00285	0.0111	0.016	0.00056
MINIMUM :	0.00033	0.0006	0.007	0.00016
RANGE :	0.00252	0.0105	0.008	0.00040
ARITH. MEAN :	0.00095	0.0020	0.011	0.00031
ARITH. STD. DEV :	0.00088	0.0030	0.003	0.00011
GEOM. MEAN :	0.00067	0.0012	0.010	0.00029
GEOM. STD. DEV. :	2.33644	2.4677	1.276	1.43249
1ST QUARTILE :	0.00034	0.0007	0.009	0.00025
2ND QUARTILE :	0.00039	0.0008	0.010	0.00030
3RD QUARTILE :	0.00154	0.0019	0.013	0.00037



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORSET/CUMULATIVE/LO-VOL                      #20

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	12	12	13	13	13	13
MAXIMUM :	14.78	5.51	8.29	0.47	0.21	0.21	0.12
MINIMUM :	1.69	1.74	1.77	0.14	0.05	0.02	0.02
RANGE :	13.09	3.76	6.52	0.33	0.15	0.19	0.10
ARITH. MEAN :	3.97	3.13	3.09	0.31	0.15	0.11	0.05
ARITH. STD. DEV :	3.53	1.07	1.82	0.10	0.04	0.06	0.03
GEOM. MEAN :	3.23	2.98	2.78	0.30	0.14	0.09	0.04
GEOM. STD. DEV. :	1.80	1.38	1.54	1.41	1.40	2.00	1.76
1ST QUARTILE :	2.27	2.37	2.11	0.26	0.14	0.05	0.03
2ND QUARTILE :	2.89	2.74	2.45	0.28	0.16	0.10	0.04
3RD QUARTILE :	3.22	3.85	3.09	0.35	0.17	0.11	0.06

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORSET/CUMULATIVE/LO-VOL      #20

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	0.059	0.154	0.192	0.202	0.036	0.006	0.0034
MINIMUM :	0.021	0.014	0.024	0.012	0.018	0.000	0.0010
RANGE :	0.037	0.139	0.168	0.190	0.018	0.006	0.0025
ARITH. MEAN :	0.041	0.084	0.080	0.060	0.024	0.003	0.0020
ARITH. STD. DEV :	0.010	0.041	0.054	0.057	0.006	0.002	0.0008
GEOM. MEAN :	0.040	0.073	0.065	0.041	0.023	0.003	0.0018
GEOM. STD. DEV. :	1.291	1.868	1.983	2.414	1.249	2.257	1.4708
1ST QUARTILE :	0.035	0.059	0.035	0.023	0.018	0.002	0.0016
2ND QUARTILE :	0.039	0.072	0.057	0.031	0.022	0.003	0.0017
3RD QUARTILE :	0.045	0.100	0.109	0.074	0.025	0.004	0.0022

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORSET/CUMULATIVE/LO-VOL      #20

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13
MAXIMUM :	0.00097	0.0007	0.026	0.00077
MINIMUM :	0.00029	0.0006	0.007	0.00016
RANGE :	0.00068	0.0001	0.019	0.00062
ARITH. MEAN :	0.00037	0.0006	0.012	0.00034
ARITH. STD. DEV :	0.00018	0.0000	0.005	0.00017
GEOM. MEAN :	0.00034	0.0006	0.011	0.00030
GEOM. STD. DEV. :	1.37295	1.0474	1.434	1.62210
1ST QUARTILE :	0.00030	0.0006	0.009	0.00019
2ND QUARTILE :	0.00031	0.0006	0.010	0.00029
3RD QUARTILE :	0.00033	0.0006	0.011	0.00038

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MCKELLAR/CUMULATIVE/LO-VOL #21

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	13	13	13	12	13	13
MAXIMUM :	9.10	6.78	5.62	0.63	0.44	0.35	0.07
MINIMUM :	2.30	1.65	1.94	0.16	0.06	0.01	0.02
RANGE :	6.80	5.12	3.68	0.47	0.39	0.34	0.06
ARITH. MEAN :	4.52	3.32	3.37	0.33	0.22	0.16	0.03
ARITH. STD. DEV :	2.24	1.48	1.33	0.12	0.12	0.10	0.02
GEOM. MEAN :	4.09	3.07	3.15	0.31	0.19	0.12	0.03
GEOM. STD. DEV. :	1.57	1.49	1.44	1.43	1.79	2.81	1.60
1ST QUARTILE :	2.69	2.37	2.42	0.24	0.13	0.08	0.02
2ND QUARTILE :	3.88	2.72	2.80	0.30	0.19	0.16	0.03
3RD QUARTILE :	4.57	3.73	3.64	0.39	0.27	0.19	0.04

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MCKELLAR/CUMULATIVE/LO-VOL #21

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	12	13	13	13	13	13
MAXIMUM :	0.087	0.317	0.143	0.082	0.063	0.007	0.0031
MINIMUM :	0.025	0.044	0.019	0.007	0.020	0.001	0.0003
RANGE :	0.062	0.272	0.123	0.075	0.043	0.007	0.0028
ARITH. MEAN :	0.049	0.129	0.060	0.034	0.035	0.003	0.0019
ARITH. STD. DEV :	0.017	0.084	0.039	0.025	0.013	0.002	0.0008
GEOM. MEAN :	0.047	0.109	0.050	0.027	0.033	0.002	0.0016
GEOM. STD. DEV. :	1.417	1.831	1.818	2.146	1.440	1.929	1.8512
1ST QUARTILE :	0.035	0.070	0.036	0.014	0.022	0.002	0.0013
2ND QUARTILE :	0.048	0.097	0.043	0.027	0.033	0.002	0.0017
3RD QUARTILE :	0.055	0.169	0.063	0.038	0.036	0.004	0.0025

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : MCKELLAR/CUMULATIVE/LO-VOL #21

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	13	13
MAXIMUM :	0.00062	0.0007	0.037	0.00076
MINIMUM :	0.00026	0.0005	0.005	0.00016
RANGE :	0.00036	0.0002	0.032	0.00059
ARITH. MEAN :	0.00032	0.0006	0.012	0.00034
ARITH. STD. DEV :	0.00010	0.0000	0.008	0.00015
GEOM. MEAN :	0.00031	0.0006	0.010	0.00032
GEOM. STD. DEV. :	1.25611	1.0824	1.673	1.49715
1ST QUARTILE :	0.00028	0.0006	0.007	0.00023
2ND QUARTILE :	0.00031	0.0006	0.009	0.00031
3RD QUARTILE :	0.00031	0.0006	0.012	0.00038

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE/LO-VOL      #22

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	12	12	12	12	13	13
MAXIMUM :	8.20	4.65	4.92	0.56	0.35	0.37	0.35
MINIMUM :	1.59	1.30	1.39	0.07	0.09	0.01	0.00
RANGE :	6.61	3.35	3.54	0.49	0.26	0.36	0.35
ARITH. MEAN :	3.49	2.92	2.75	0.22	0.21	0.15	0.09
ARITH. STD. DEV :	2.13	1.11	1.15	0.14	0.09	0.10	0.11
GEOM. MEAN :	3.00	2.72	2.55	0.19	0.19	0.11	0.05
GEOM. STD. DEV. :	1.75	1.48	1.49	1.81	1.58	2.81	3.51
1ST QUARTILE :	1.76	2.19	1.92	0.12	0.15	0.07	0.03
2ND QUARTILE :	2.63	2.42	2.54	0.19	0.21	0.12	0.04
3RD QUARTILE :	4.21	4.03	3.14	0.27	0.27	0.19	0.08

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MATTAWA/CUMULATIVE/LO-VOL

#22

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	13	13	13	13	13	13
MAXIMUM :	0.113	0.261	0.634	0.535	0.096	0.020	0.0059
MINIMUM :	0.036	0.059	0.021	0.002	0.025	0.001	0.0003
RANGE :	0.077	0.202	0.613	0.533	0.071	0.019	0.0056
ARITH. MEAN :	0.066	0.136	0.216	0.130	0.041	0.007	0.0025
ARITH. STD. DEV :	0.027	0.062	0.207	0.164	0.018	0.006	0.0015
GEOM. MEAN :	0.061	0.124	0.136	0.058	0.039	0.005	0.0020
GEOM. STD. DEV. :	1.496	1.549	2.915	4.646	1.394	2.760	2.0944
1ST QUARTILE :	0.045	0.095	0.055	0.026	0.031	0.003	0.0013
2ND QUARTILE :	0.054	0.114	0.154	0.069	0.037	0.005	0.0019
3RD QUARTILE :	0.092	0.150	0.203	0.111	0.041	0.008	0.0032



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : MATTAWA/CUMULATIVE/LO-VOL #22

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	13	13
MAXIMUM :	0.00147	0.0025	0.038	0.00130
MINIMUM :	0.00028	0.0006	0.009	0.00012
RANGE :	0.00119	0.0019	0.030	0.00118
ARITH. MEAN :	0.00057	0.0009	0.015	0.00045
ARITH. STD. DEV :	0.00039	0.0007	0.008	0.00031
GEOM. MEAN :	0.00048	0.0008	0.013	0.00037
GEOM. STD. DEV. :	1.79632	1.6901	1.552	1.90821
1ST QUARTILE :	0.00031	0.0006	0.009	0.00026
2ND QUARTILE :	0.00033	0.0007	0.011	0.00034
3RD QUARTILE :	0.00087	0.0008	0.016	0.00049

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE/LO-VOL #23

PERIOD OF REPORT : JAN 5,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	12	12	12	12	11	12	12
MAXIMUM :	18.85	7.19	10.24	0.46	0.28	0.39	0.10
MINIMUM :	1.64	1.17	2.21	0.16	0.10	0.03	0.02
RANGE :	17.21	6.03	8.04	0.30	0.18	0.36	0.08
ARITH. MEAN :	6.36	3.37	4.30	0.32	0.17	0.14	0.04
ARITH. STD. DEV :	5.01	1.77	2.41	0.09	0.05	0.10	0.03
GEOM. MEAN :	5.13	3.01	3.85	0.31	0.17	0.11	0.04
GEOM. STD. DEV. :	1.92	1.64	1.59	1.35	1.33	2.14	1.71
1ST QUARTILE :	3.50	2.31	2.93	0.29	0.13	0.07	0.02
2ND QUARTILE :	4.73	2.72	3.23	0.31	0.17	0.12	0.04
3RD QUARTILE :	6.29	3.98	4.87	0.37	0.19	0.19	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE/LO-VOL #23

PERIOD OF REPORT : JAN 5,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	11	12	13	12	13	13
MAXIMUM :	0.075	0.171	0.117	0.116	0.047	0.007	0.0063
MINIMUM :	0.010	0.053	0.014	0.003	0.013	0.002	0.0003
RANGE :	0.065	0.118	0.103	0.113	0.034	0.006	0.0060
ARITH. MEAN :	0.049	0.104	0.050	0.039	0.031	0.003	0.0030
ARITH. STD. DEV :	0.018	0.040	0.028	0.034	0.009	0.002	0.0019
GEOM. MEAN :	0.044	0.098	0.043	0.027	0.029	0.003	0.0022
GEOM. STD. DEV. :	1.723	1.469	1.823	2.633	1.404	1.669	2.5839
1ST QUARTILE :	0.037	0.071	0.024	0.015	0.028	0.002	0.0015
2ND QUARTILE :	0.047	0.090	0.049	0.027	0.031	0.002	0.0031
3RD QUARTILE :	0.065	0.139	0.063	0.043	0.035	0.003	0.0035

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : KILLARNEY/CUMULATIVE/LO-VOL      #23

PERIOD OF REPORT : JAN 5,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	12	13	12
MAXIMUM :	0.00279	0.0009	0.012	0.00138
MINIMUM :	0.00026	0.0005	0.004	0.00020
RANGE :	0.00253	0.0004	0.008	0.00119
ARITH. MEAN :	0.00060	0.0006	0.009	0.00045
ARITH. STD. DEV :	0.00072	0.0001	0.002	0.00034
GEOM. MEAN :	0.00043	0.0006	0.008	0.00038
GEOM. STD. DEV. :	2.05207	1.1686	1.373	1.81179
1ST QUARTILE :	0.00027	0.0005	0.007	0.00023
2ND QUARTILE :	0.00030	0.0006	0.009	0.00030
3RD QUARTILE :	0.00061	0.0006	0.010	0.00059

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOWGANDA/CUMULATIVE/LO-VOL      #25

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	13	13	13	12	13	13
MAXIMUM :	6.03	4.43	3.67	0.35	0.27	0.16	0.10
MINIMUM :	1.08	1.52	1.18	0.07	0.04	0.02	0.01
RANGE :	4.95	2.91	2.49	0.28	0.23	0.15	0.09
ARITH. MEAN :	3.26	2.50	2.46	0.18	0.14	0.08	0.04
ARITH. STD. DEV :	1.39	0.92	0.75	0.09	0.07	0.04	0.02
GEOM. MEAN :	2.95	2.36	2.35	0.16	0.12	0.07	0.03
GEOM. STD. DEV. :	1.64	1.41	1.40	1.64	1.69	1.92	1.76
1ST QUARTILE :	2.06	1.84	2.07	0.12	0.09	0.05	0.02
2ND QUARTILE :	3.51	2.11	2.39	0.15	0.13	0.07	0.03
3RD QUARTILE :	3.63	2.64	2.84	0.20	0.17	0.11	0.04

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOWGANDA/CUMULATIVE/LO-VOL #25

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	0.138	0.169	0.210	0.219	0.033	0.007	0.0060
MINIMUM :	0.009	0.041	0.016	0.005	0.014	0.001	0.0012
RANGE :	0.129	0.127	0.194	0.214	0.019	0.006	0.0048
ARITH. MEAN :	0.049	0.097	0.067	0.058	0.023	0.003	0.0029
ARITH. STD. DEV :	0.036	0.043	0.051	0.059	0.005	0.002	0.0013
GEOM. MEAN :	0.040	0.089	0.053	0.036	0.022	0.003	0.0027
GEOM. STD. DEV. :	1.954	1.567	2.087	3.017	1.275	1.851	1.5314
1ST QUARTILE :	0.031	0.067	0.025	0.016	0.018	0.002	0.0020
2ND QUARTILE :	0.037	0.085	0.056	0.038	0.022	0.003	0.0025
3RD QUARTILE :	0.042	0.105	0.084	0.066	0.025	0.004	0.0032

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GOWGANDA/CUMULATIVE/LO-VOL #25

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	13	13	13
MAXIMUM :	0.00176	0.0018	0.023	0.00115
MINIMUM :	0.00027	0.0005	0.007	0.00016
RANGE :	0.00148	0.0013	0.016	0.00099
ARITH. MEAN :	0.00065	0.0007	0.012	0.00044
ARITH. STD. DEV :	0.00056	0.0003	0.005	0.00026
GEOM. MEAN :	0.00050	0.0007	0.011	0.00038
GEOM. STD. DEV. :	2.07237	1.3591	1.473	1.71816
1ST QUARTILE :	0.00029	0.0006	0.008	0.00026
2ND QUARTILE :	0.00032	0.0006	0.009	0.00037
3RD QUARTILE :	0.00096	0.0007	0.013	0.00054

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE/LO-VOL #27

PERIOD OF REPORT : JAN 6,83 TO JAN 4,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	11	10	10	10	9	11	11
MAXIMUM :	3.88	2.82	2.25	0.14	0.31	0.77	0.17
MINIMUM :	0.49	1.12	0.88	0.05	0.11	0.01	0.02
RANGE :	3.39	1.71	1.37	0.10	0.20	0.76	0.15
ARITH. MEAN :	1.89	1.84	1.46	0.10	0.16	0.24	0.07
ARITH. STD. DEV :	1.10	0.49	0.45	0.03	0.07	0.24	0.05
GEOM. MEAN :	1.60	1.79	1.40	0.09	0.15	0.14	0.05
GEOM. STD. DEV. :	1.88	1.31	1.36	1.40	1.43	3.57	1.88
1ST QUARTILE :	0.89	1.42	1.02	0.07	0.11	0.06	0.03
2ND QUARTILE :	1.64	1.89	1.38	0.10	0.14	0.16	0.04
3RD QUARTILE :	2.62	1.96	1.64	0.11	0.17	0.34	0.08



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE/LO-VOL      #27

PERIOD OF REPORT : JAN 6,83 TO JAN 4,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	11	11	11	10	11	11	11
MAXIMUM :	0.062	0.244	0.110	0.082	0.021	0.007	0.0038
MINIMUM :	0.024	0.047	0.013	0.007	0.009	0.001	0.0009
RANGE :	0.039	0.197	0.098	0.075	0.012	0.006	0.0029
ARITH. MEAN :	0.036	0.130	0.052	0.031	0.015	0.003	0.0019
ARITH. STD. DEV :	0.012	0.066	0.029	0.024	0.004	0.002	0.0009
GEOM. MEAN :	0.034	0.114	0.044	0.024	0.015	0.002	0.0017
GEOM. STD. DEV. :	1.374	1.767	1.853	2.102	1.324	2.099	1.5547
1ST QUARTILE :	0.024	0.060	0.028	0.013	0.011	0.001	0.0012
2ND QUARTILE :	0.032	0.120	0.039	0.024	0.015	0.002	0.0015
3RD QUARTILE :	0.041	0.180	0.069	0.029	0.019	0.004	0.0022

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MOONBEAM/CUMULATIVE/LO-VOL      #27

PERIOD OF REPORT : JAN 6,83 TO JAN 4,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	11	11	11	11
MAXIMUM :	0.00193	0.0017	0.015	0.00077
MINIMUM :	0.00026	0.0005	0.003	0.00008
RANGE :	0.00167	0.0011	0.012	0.00069
ARITH. MEAN :	0.00047	0.0007	0.007	0.00032
ARITH. STD. DEV :	0.00049	0.0003	0.004	0.00023
GEOM. MEAN :	0.00038	0.0007	0.006	0.00026
GEOM. STD. DEV. :	1.75543	1.3804	1.659	2.02561
1ST QUARTILE :	0.00028	0.0006	0.004	0.00012
2ND QUARTILE :	0.00031	0.0006	0.006	0.00026
3RD QUARTILE :	0.00039	0.0007	0.008	0.00035

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : ATTAWAPISKAT/CUMULATIVE/LO-VOL #28

PERIOD OF REPORT : DEC 16,82 TO DEC 7,83

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	5	5	5	5	2	4	4
MAXIMUM :	3.07	5.41	3.33	0.29	0.35	1.02	0.40
MINIMUM :	0.00	1.84	0.82	0.05	0.30	0.62	0.15
RANGE :	3.07	3.56	2.51	0.24	0.05	0.40	0.26
ARITH. MEAN :	1.13	3.59	1.76	0.11	0.32	0.76	0.28
ARITH. STD. DEV :	1.19	1.75	0.98	0.10	0.04	0.18	0.13
GEOM. MEAN :	1.07	3.23	1.57	0.09	0.32	0.74	0.26
GEOM. STD. DEV. :	2.08	1.68	1.71	2.03	1.13	1.24	1.64
1ST QUARTILE :	0.20	1.91	0.95	0.05	*****	0.65	0.18
2ND QUARTILE :	0.62	2.65	1.42	0.06	*****	0.69	0.29
3RD QUARTILE :	1.08	4.35	1.79	0.07	*****	0.86	0.39

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : ATTAWAPISKAT/CUMULATIVE/LO-VOL #28

PERIOD OF REPORT : DEC 16,82 TO DEC 7,83

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	4	2	5	5	5	5	5
MAXIMUM :	0.681	0.118	0.478	0.291	0.066	0.018	0.0072
MINIMUM :	0.046	0.110	0.044	0.006	0.018	0.003	0.0003
RANGE :	0.635	0.009	0.434	0.285	0.048	0.015	0.0069
ARITH. MEAN :	0.236	0.114	0.146	0.082	0.036	0.008	0.0027
ARITH. STD. DEV :	0.301	0.006	0.186	0.118	0.019	0.006	0.0028
GEOM. MEAN :	0.129	0.114	0.093	0.038	0.032	0.006	0.0016
GEOM. STD. DEV. :	3.457	1.055	2.594	4.024	1.708	2.205	3.2503
1ST QUARTILE :	0.050	*****	0.049	0.014	0.019	0.003	0.0007
2ND QUARTILE :	0.108	*****	0.062	0.031	0.027	0.004	0.0012
3RD QUARTILE :	0.421	*****	0.078	0.046	0.038	0.008	0.0024

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : ATTAWAPISKAT/CUMULATIVE/LO-VOL #28

PERIOD OF REPORT : DEC 16,82 TO DEC 7,83

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	5	5	5	4
MAXIMUM :	0.00180	0.0036	0.082	0.00102
MINIMUM :	0.00033	0.0006	0.005	0.00011
RANGE :	0.00147	0.0030	0.077	0.00092
ARITH. MEAN :	0.00108	0.0019	0.032	0.00043
ARITH. STD. DEV :	0.00054	0.0013	0.032	0.00043
GEOM. MEAN :	0.00094	0.0015	0.019	0.00028
GEOM. STD. DEV. :	1.89701	2.3268	3.441	2.89065
1ST QUARTILE :	0.00061	0.0006	0.005	0.00012
2ND QUARTILE :	0.00100	0.0014	0.014	0.00029
3RD QUARTILE :	0.00119	0.0024	0.034	0.00073

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : GERALDTON/CUMULATIVE/LO-VOL #30

PERIOD OF REPORT : AUG 16,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	5	4	4	4	4	5	5
MAXIMUM :	1.62	1.47	0.60	0.13	0.15	0.49	0.10
MINIMUM :	0.00	0.62	0.28	0.04	0.00	0.03	0.02
RANGE :	1.62	0.85	0.32	0.09	0.15	0.45	0.08
ARITH. MEAN :	0.49	1.04	0.45	0.08	0.09	0.23	0.05
ARITH. STD. DEV :	0.72	0.38	0.14	0.04	0.07	0.20	0.03
GEOM. MEAN :	0.17	0.99	0.43	0.07	0.19	0.14	0.04
GEOM. STD. DEV. :	10.73	1.47	1.38	1.62	1.99	3.44	1.91
1ST QUARTILE :	0.01	0.73	0.35	0.05	0.03	0.04	0.03
2ND QUARTILE :	0.01	1.03	0.46	0.07	0.10	0.13	0.03
3RD QUARTILE :	0.40	1.35	0.55	0.11	0.15	0.29	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : GERALDTON/CUMULATIVE/LO-VOL      #30

PERIOD OF REPORT : AUG 16,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	5	5	5	5	5	5	5
MAXIMUM :	0.042	0.170	0.085	0.037	0.009	0.004	0.0014
MINIMUM :	0.004	0.052	0.008	0.003	0.003	0.000	0.0003
RANGE :	0.037	0.118	0.077	0.034	0.006	0.004	0.0011
ARITH. MEAN :	0.022	0.130	0.036	0.017	0.006	0.002	0.0007
ARITH. STD. DEV :	0.013	0.048	0.031	0.012	0.002	0.002	0.0005
GEOM. MEAN :	0.018	0.120	0.026	0.013	0.005	0.001	0.0006
GEOM. STD. DEV. :	2.298	1.634	2.620	2.597	1.564	2.676	1.9906
1ST QUARTILE :	0.012	0.084	0.010	0.007	0.004	0.001	0.0003
2ND QUARTILE :	0.019	0.134	0.021	0.014	0.005	0.001	0.0004
3RD QUARTILE :	0.022	0.157	0.038	0.016	0.006	0.001	0.0007

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : GERALDTON/CUMULATIVE/LO-VOL      #30

PERIOD OF REPORT : AUG 16,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	5	5	5	5
MAXIMUM :	0.00045	0.0009	0.013	0.00019
MINIMUM :	0.00027	0.0005	0.002	0.00003
RANGE :	0.00018	0.0004	0.011	0.00016
ARITH. MEAN :	0.00033	0.0007	0.006	0.00008
ARITH. STD. DEV. :	0.00007	0.0001	0.004	0.00007
GEOM. MEAN :	0.00033	0.0007	0.005	0.00006
GEOM. STD. DEV. :	1.22345	1.2234	1.878	2.16062
1ST QUARTILE :	0.00028	0.0006	0.003	0.00003
2ND QUARTILE :	0.00029	0.0006	0.005	0.00004
3RD QUARTILE :	0.00033	0.0007	0.006	0.00007



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NAKINA/CUMULATIVE/LO-VOL      #30A

PERIOD OF REPORT : JAN 4,83 TO JUL 19,83

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	7	6	6	7	7	7	7
MAXIMUM :	2.59	2.38	2.07	0.14	0.21	1.85	0.35
MINIMUM :	0.58	1.44	0.77	0.06	0.12	0.05	0.01
RANGE :	2.01	0.94	1.30	0.08	0.10	1.80	0.33
ARITH. MEAN :	1.35	2.02	1.31	0.12	0.17	0.62	0.15
ARITH. STD. DEV :	0.70	0.35	0.43	0.03	0.03	0.75	0.13
GEOM. MEAN :	1.21	1.99	1.26	0.11	0.17	0.23	0.08
GEOM. STD. DEV. :	1.67	1.21	1.38	1.39	1.20	5.08	3.80
1ST QUARTILE :	0.72	1.64	0.96	0.08	0.14	0.06	0.02
2ND QUARTILE :	0.99	2.07	1.22	0.13	0.17	0.07	0.11
3RD QUARTILE :	1.74	2.25	1.36	0.14	0.18	1.13	0.22

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : NAKINA/CUMULATIVE/LO-VOL      #30A

PERIOD OF REPORT : JAN 4,83 TO JUL 19,83

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	7	7	7	7	7	7	7
MAXIMUM :	0.069	0.207	0.283	0.359	0.047	0.010	0.0027
MINIMUM :	0.019	0.059	0.048	0.002	0.005	0.000	0.0003
RANGE :	0.051	0.148	0.234	0.358	0.041	0.010	0.0023
ARITH. MEAN :	0.043	0.111	0.147	0.086	0.019	0.004	0.0012
ARITH. STD. DEV :	0.020	0.052	0.084	0.125	0.014	0.004	0.0008
GEOM. MEAN :	0.039	0.102	0.124	0.035	0.015	0.003	0.0009
GEOM. STD. DEV. :	1.648	1.571	1.945	5.232	2.092	3.138	2.1540
1ST QUARTILE :	0.022	0.061	0.052	0.009	0.006	0.001	0.0003
2ND QUARTILE :	0.035	0.091	0.128	0.038	0.016	0.002	0.0011
3RD QUARTILE :	0.059	0.134	0.192	0.075	0.022	0.006	0.0013

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NAKINA/CUMULATIVE/LO-VOL      #30A

PERIOD OF REPORT : JAN 4,83 TO JUL 19,83

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	7	7	7	7
MAXIMUM :	0.00035	0.0007	0.005	0.00017
MINIMUM :	0.00032	0.0006	0.003	0.00003
RANGE :	0.00002	0.0000	0.003	0.00013
ARITH. MEAN :	0.00034	0.0007	0.004	0.00010
ARITH. STD. DEV :	0.00001	0.0000	0.001	0.00005
GEOM. MEAN :	0.00034	0.0007	0.004	0.00009
GEOM. STD. DEV. :	1.02460	1.0246	1.342	1.96797
1ST QUARTILE :	0.00033	0.0007	0.003	0.00003
2ND QUARTILE :	0.00034	0.0007	0.004	0.00010
3RD QUARTILE :	0.00034	0.0007	0.005	0.00015

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORION/CUMULATIVE/LO-VOL      #31

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	11	11	12	12	13	13
MAXIMUM :	1.87	2.38	1.59	0.17	0.12	0.27	0.11
MINIMUM :	0.00	0.53	0.18	0.04	0.00	0.01	0.02
RANGE :	1.87	1.86	1.41	0.13	0.12	0.26	0.10
ARITH. MEAN :	0.77	1.40	0.81	0.09	0.08	0.10	0.04
ARITH. STD. DEV :	0.66	0.69	0.51	0.04	0.04	0.07	0.03
GEOM. MEAN :	0.75	1.24	0.66	0.08	0.10	0.07	0.03
GEOM. STD. DEV. :	2.07	1.70	2.04	1.57	1.46	2.48	1.81
1ST QUARTILE :	0.23	0.74	0.40	0.06	0.05	0.06	0.02
2ND QUARTILE :	0.51	1.15	0.48	0.09	0.08	0.07	0.03
3RD QUARTILE :	1.18	2.05	1.17	0.12	0.11	0.10	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORION/CUMULATIVE/LO-VOL      #31

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	0.050	0.162	0.116	0.105	0.018	0.006	0.0035
MINIMUM :	0.013	0.028	0.010	0.007	0.004	0.000	0.0003
RANGE :	0.037	0.133	0.106	0.098	0.014	0.006	0.0032
ARITH. MEAN :	0.029	0.086	0.051	0.043	0.010	0.003	0.0009
ARITH. STD. DEV :	0.011	0.040	0.034	0.033	0.005	0.002	0.0009
GEOM. MEAN :	0.027	0.077	0.040	0.031	0.009	0.002	0.0006
GEOM. STD. DEV. :	1.459	1.701	2.186	2.429	1.658	2.198	2.2843
1ST QUARTILE :	0.023	0.046	0.019	0.016	0.007	0.001	0.0003
2ND QUARTILE :	0.027	0.080	0.045	0.030	0.008	0.002	0.0003
3RD QUARTILE :	0.032	0.115	0.065	0.054	0.012	0.004	0.0010

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : DORION/CUMULATIVE/LO-VOL      #31

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13
MAXIMUM :	0.00103	0.0012	0.016	0.00023
MINIMUM :	0.00030	0.0006	0.001	0.00003
RANGE :	0.00073	0.0006	0.015	0.00020
ARITH. MEAN :	0.00038	0.0007	0.004	0.00009
ARITH. STD. DEV :	0.00020	0.0002	0.004	0.00006
GEOM. MEAN :	0.00036	0.0007	0.003	0.00007
GEOM. STD. DEV. :	1.38441	1.1925	2.300	2.09657
1ST QUARTILE :	0.00031	0.0006	0.002	0.00003
2ND QUARTILE :	0.00032	0.0006	0.003	0.00007
3RD QUARTILE :	0.00033	0.0007	0.004	0.00010

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EAR FALLS/CUMULATIVE/LO-VOL #35

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	13	11	11	11	11	13	13
MAXIMUM :	1.62	2.12	1.47	0.23	0.22	0.34	0.09
MINIMUM :	0.00	0.28	0.28	0.05	0.00	0.01	0.01
RANGE :	1.62	1.84	1.19	0.18	0.22	0.34	0.08
ARITH. MEAN :	0.59	1.43	0.77	0.11	0.12	0.11	0.04
ARITH. STD. DEV :	0.52	0.60	0.40	0.05	0.06	0.08	0.02
GEOM. MEAN :	0.59	1.27	0.67	0.10	0.16	0.08	0.03
GEOM. STD. DEV. :	2.13	1.81	1.74	1.58	1.44	2.74	1.74
1ST QUARTILE :	0.22	0.89	0.38	0.06	0.09	0.06	0.02
2ND QUARTILE :	0.39	1.34	0.63	0.09	0.10	0.10	0.03
3RD QUARTILE :	0.75	1.97	1.05	0.13	0.16	0.12	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EAR FALLS/CUMULATIVE/LO-VOL #35

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	13	13	13	13	13	12	13
MAXIMUM :	0.120	0.215	0.164	0.210	0.032	0.006	0.0019
MINIMUM :	0.011	0.033	0.015	0.007	0.005	0.000	0.0003
RANGE :	0.109	0.182	0.149	0.203	0.026	0.006	0.0017
ARITH. MEAN :	0.040	0.101	0.068	0.056	0.016	0.003	0.0008
ARITH. STD. DEV :	0.028	0.061	0.042	0.057	0.006	0.002	0.0006
GEOM. MEAN :	0.034	0.084	0.056	0.037	0.014	0.002	0.0006
GEOM. STD. DEV. :	1.758	1.894	2.013	2.555	1.533	2.157	2.1773
1ST QUARTILE :	0.024	0.048	0.037	0.021	0.011	0.002	0.0003
2ND QUARTILE :	0.031	0.071	0.055	0.033	0.015	0.002	0.0005
3RD QUARTILE :	0.037	0.140	0.094	0.064	0.017	0.003	0.0011



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EAR FALLS/CUMULATIVE/LO-VOL      #35

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	12	13	13	13
MAXIMUM :	0.00207	0.0012	0.009	0.00020
MINIMUM :	0.00028	0.0006	0.001	0.00003
RANGE :	0.00179	0.0007	0.008	0.00018
ARITH. MEAN :	0.00060	0.0007	0.004	0.00008
ARITH. STD. DEV :	0.00064	0.0002	0.002	0.00005
GEOM. MEAN :	0.00044	0.0007	0.003	0.00007
GEOM. STD. DEV. :	2.07376	1.2401	1.967	1.93860
1ST QUARTILE :	0.00028	0.0006	0.002	0.00003
2ND QUARTILE :	0.00032	0.0006	0.003	0.00008
3RD QUARTILE :	0.00047	0.0007	0.006	0.00009

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE/LO-VOL #36

PERIOD OF REPORT : FEB 1,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	10	9	9	8	8	10	10
MAXIMUM :	1.94	2.27	1.73	0.12	0.20	0.57	0.15
MINIMUM :	0.00	0.97	0.33	0.04	0.00	0.01	0.02
RANGE :	1.94	1.30	1.39	0.07	0.20	0.56	0.14
ARITH. MEAN :	0.80	1.53	0.85	0.08	0.10	0.22	0.06
ARITH. STD. DEV. :	0.77	0.55	0.53	0.03	0.06	0.20	0.04
GEOM. MEAN :	0.49	1.44	0.72	0.07	0.14	0.12	0.05
GEOM. STD. DEV. :	4.71	1.44	1.85	1.45	1.55	4.13	2.05
1ST QUARTILE :	0.09	1.00	0.39	0.05	0.07	0.05	0.03
2ND QUARTILE :	0.55	1.24	0.65	0.08	0.10	0.18	0.06
3RD QUARTILE :	1.38	1.95	0.99	0.09	0.12	0.35	0.09

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE/LO-VOL      #36

PERIOD OF REPORT : FEB 1,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	10	10	10	10	10	9	10
MAXIMUM :	0.086	0.206	0.228	0.137	0.029	0.007	0.0054
MINIMUM :	0.018	0.027	0.008	0.003	0.008	0.000	0.0003
RANGE :	0.068	0.179	0.220	0.134	0.021	0.007	0.0051
ARITH. MEAN :	0.033	0.113	0.066	0.049	0.016	0.003	0.0020
ARITH. STD. DEV :	0.020	0.062	0.063	0.050	0.006	0.002	0.0015
GEOM. MEAN :	0.030	0.096	0.047	0.028	0.015	0.002	0.0015
GEOM. STD. DEV. :	1.567	1.907	2.499	3.292	1.461	2.646	2.5203
1ST QUARTILE :	0.022	0.062	0.023	0.011	0.011	0.001	0.0007
2ND QUARTILE :	0.026	0.105	0.047	0.026	0.015	0.002	0.0019
3RD QUARTILE :	0.033	0.156	0.077	0.057	0.016	0.003	0.0026

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : PICKLE LAKE/CUMULATIVE/LO-VOL #36

PERIOD OF REPORT : FEB 1,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	10	10	10	10
MAXIMUM :	0.01074	0.0007	0.006	0.00019
MINIMUM :	0.00031	0.0005	0.002	0.00003
RANGE :	0.01043	0.0002	0.004	0.00016
ARITH. MEAN :	0.00168	0.0006	0.004	0.00010
ARITH. STD. DEV :	0.00328	0.0000	0.001	0.00005
GEOM. MEAN :	0.00064	0.0006	0.004	0.00009
GEOM. STD. DEV. :	3.40291	1.0804	1.484	1.81406
1ST QUARTILE :	0.00031	0.0006	0.003	0.00005
2ND QUARTILE :	0.00033	0.0006	0.004	0.00010
3RD QUARTILE :	0.00067	0.0007	0.005	0.00012

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : TURKEY LAKE/CUMULATIVE/LO-VOL      #37

PERIOD OF REPORT : NOV 8,83 TO JAN 4,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	2	2	2	2	2	2	2
MAXIMUM :	3.57	1.40	2.25	0.21	0.13	0.03	0.02
MINIMUM :	1.79	1.15	1.28	0.14	0.10	0.01	0.02
RANGE :	1.78	0.25	0.98	0.06	0.03	0.02	0.00
ARITH. MEAN :	2.68	1.28	1.77	0.18	0.11	0.02	0.02
ARITH. STD. DEV :	1.26	0.18	0.69	0.04	0.02	0.02	0.00
GEOM. MEAN :	2.53	1.27	1.70	0.17	0.11	0.01	0.02
GEOM. STD. DEV. :	1.63	1.15	1.49	1.30	1.17	3.08	1.01
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : TURKEY LAKE/CUMULATIVE/LO-VOL #37

PERIOD OF REPORT : NOV 8,83 TO JAN 4,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	2	2	2	2	2	2	2
MAXIMUM :	0.022	0.109	0.026	0.013	0.008	0.002	0.0010
MINIMUM :	0.013	0.080	0.013	0.008	0.005	0.002	0.0010
RANGE :	0.010	0.029	0.013	0.005	0.003	0.000	0.0000
ARITH. MEAN :	0.018	0.094	0.019	0.011	0.007	0.002	0.0010
ARITH. STD. DEV :	0.007	0.020	0.009	0.004	0.002	0.000	0.0000
GEOM. MEAN :	0.017	0.093	0.018	0.010	0.006	0.002	0.0010
GEOM. STD. DEV. :	1.487	1.242	1.634	1.408	1.460	1.001	1.0007
1ST QUARTILE :	*****	*****	*****	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : TURKEY LAKE/CUMULATIVE/LO-VOL #37

PERIOD OF REPORT : NOV 8,83 TO JAN 4,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	2	2	2	2
MAXIMUM :	0.00032	0.0006	0.004	0.00023
MINIMUM :	0.00032	0.0006	0.003	0.00010
RANGE :	0.00000	0.0000	0.001	0.00013
ARITH. MEAN :	0.00032	0.0006	0.004	0.00017
ARITH. STD. DEV :	0.00000	0.0000	0.000	0.00009
GEOM. MEAN :	0.00032	0.0006	0.003	0.00015
GEOM. STD. DEV. :	1.00111	1.0011	1.136	1.77295
1ST QUARTILE :	*****	*****	*****	*****
2ND QUARTILE :	*****	*****	*****	*****
3RD QUARTILE :	*****	*****	*****	*****

\*\*\*\*\* : INSUFFICIENT DATA

**PART IV**

**SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY REGION**



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIUM UG/M**3
# OF SAMPLES :	51	47	47	50	51	50	47
MAXIMUM :	21.83	11.22	12.17	1.19	1.24	3.85	0.52
MINIMUM :	1.18	1.72	1.31	0.14	0.05	0.02	0.01
RANGE :	20.65	9.50	10.85	1.05	1.19	3.83	0.50
ARITH. MEAN :	5.93	4.19	4.44	0.58	0.37	0.95	0.11
ARITH. STD. DEV :	4.85	2.01	2.60	0.25	0.25	0.90	0.13
GEOM. MEAN :	4.54	3.81	3.81	0.52	0.30	0.51	0.07
GEOM. STD. DEV. :	2.04	1.54	1.74	1.62	1.91	3.67	2.46
1ST QUARTILE :	2.77	2.74	2.52	0.35	0.17	0.19	0.04
2ND QUARTILE :	3.80	3.64	3.50	0.54	0.26	0.72	0.06
3RD QUARTILE :	6.96	5.04	5.47	0.73	0.49	1.43	0.12

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : CENTRAL REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	51	44	51	51	51	51	50
MAXIMUM :	0.467	0.320	0.248	0.336	0.189	0.028	0.0046
MINIMUM :	0.021	0.014	0.024	0.012	0.018	0.000	0.0003
RANGE :	0.445	0.306	0.224	0.324	0.171	0.027	0.0043
ARITH. MEAN :	0.079	0.125	0.096	0.068	0.065	0.008	0.0023
ARITH. STD. DEV :	0.073	0.074	0.056	0.058	0.047	0.006	0.0010
GEOM. MEAN :	0.063	0.107	0.081	0.053	0.052	0.006	0.0020
GEOM. STD. DEV. :	1.813	1.800	1.817	2.009	1.954	2.387	1.7135
1ST QUARTILE :	0.042	0.077	0.052	0.029	0.031	0.003	0.0016
2ND QUARTILE :	0.060	0.108	0.083	0.052	0.046	0.006	0.0019
3RD QUARTILE :	0.087	0.139	0.127	0.085	0.070	0.011	0.0030

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : CENTRAL REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	50	51	51	51
MAXIMUM :	0.00252	0.0031	0.085	0.00123
MINIMUM :	0.00026	0.0005	0.007	0.00003
RANGE :	0.00226	0.0026	0.078	0.00120
ARITH. MEAN :	0.00054	0.0010	0.022	0.00039
ARITH. STD. DEV :	0.00048	0.0007	0.016	0.00021
GEOM. MEAN :	0.00043	0.0009	0.018	0.00033
GEOM. STD. DEV. :	1.77132	1.7008	1.828	1.92460
1ST QUARTILE :	0.00031	0.0006	0.011	0.00026
2ND QUARTILE :	0.00033	0.0007	0.015	0.00034
3RD QUARTILE :	0.00049	0.0011	0.026	0.00046

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NORTHEASTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	74	71	71	71	63	71	71
MAXIMUM :	18.85	7.19	10.24	0.63	0.74	1.02	0.40
MINIMUM :	0.00	1.12	0.82	0.03	0.04	0.01	0.00
RANGE :	18.85	6.08	9.42	0.61	0.70	1.01	0.40
ARITH. MEAN :	3.53	2.81	2.72	0.22	0.19	0.19	0.07
ARITH. STD. DEV. :	2.94	1.34	1.59	0.13	0.11	0.20	0.08
GEOM. MEAN :	2.74	2.55	2.38	0.18	0.17	0.12	0.04
GEOM. STD. DEV. :	2.06	1.54	1.67	1.96	1.67	3.01	2.39
1ST QUARTILE :	1.68	1.89	1.74	0.10	0.11	0.06	0.02
2ND QUARTILE :	3.15	2.43	2.40	0.19	0.16	0.13	0.04
3RD QUARTILE :	4.13	3.44	3.08	0.31	0.23	0.20	0.07

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NORTHEASTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	72	69	74	74	74	75	75
MAXIMUM :	0.681	0.415	0.634	0.535	0.096	0.020	0.0072
MINIMUM :	0.009	0.041	0.013	0.002	0.005	0.001	0.0003
RANGE :	0.672	0.374	0.622	0.533	0.091	0.019	0.0069
ARITH. MEAN :	0.064	0.125	0.100	0.064	0.030	0.004	0.0023
ARITH. STD. DEV :	0.082	0.074	0.131	0.091	0.016	0.004	0.0015
GEOM. MEAN :	0.049	0.109	0.063	0.034	0.026	0.003	0.0019
GEOM. STD. DEV. :	1.945	1.687	2.458	3.051	1.684	2.220	2.0822
1ST QUARTILE :	0.035	0.072	0.036	0.016	0.019	0.002	0.0013
2ND QUARTILE :	0.047	0.104	0.060	0.034	0.028	0.003	0.0020
3RD QUARTILE :	0.066	0.160	0.087	0.069	0.036	0.005	0.0031

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NORTHEASTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	71	72	75	73
MAXIMUM :	0.00279	0.0036	0.082	0.00138
MINIMUM :	0.00023	0.0005	0.003	0.00008
RANGE :	0.00256	0.0031	0.079	0.00130
ARITH. MEAN :	0.00059	0.0009	0.013	0.00039
ARITH. STD. DEV :	0.00051	0.0007	0.013	0.00028
GEOM. MEAN :	0.00046	0.0007	0.010	0.00031
GEOM. STD. DEV. :	1.91083	1.6256	1.915	1.96409
1ST QUARTILE :	0.00029	0.0006	0.007	0.00020
2ND QUARTILE :	0.00033	0.0006	0.009	0.00031
3RD QUARTILE :	0.00084	0.0007	0.013	0.00049

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NORTHWESTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	50	42	42	43	43	50	50
MAXIMUM :	2.59	2.38	2.07	0.23	0.22	1.85	0.35
MINIMUM :	0.00	0.28	0.18	0.04	0.00	0.01	0.01
RANGE :	2.59	2.10	1.89	0.20	0.22	1.84	0.33
ARITH. MEAN :	0.76	1.48	0.84	0.10	0.11	0.22	0.06
ARITH. STD. DEV :	0.68	0.60	0.48	0.04	0.06	0.34	0.06
GEOM. MEAN :	0.59	1.33	0.70	0.09	0.14	0.11	0.04
GEOM. STD. DEV. :	3.42	1.63	1.84	1.54	1.54	3.35	2.20
1ST QUARTILE :	0.17	0.96	0.41	0.06	0.07	0.06	0.02
2ND QUARTILE :	0.58	1.41	0.68	0.09	0.11	0.10	0.04
3RD QUARTILE :	1.21	2.03	1.20	0.12	0.15	0.21	0.07

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NORTHWESTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	50	50	50	50	50	48	50
MAXIMUM :	0.120	0.215	0.283	0.359	0.047	0.010	0.0054
MINIMUM :	0.004	0.027	0.008	0.002	0.003	0.000	0.0003
RANGE :	0.116	0.188	0.275	0.358	0.044	0.010	0.0051
ARITH. MEAN :	0.034	0.102	0.070	0.051	0.014	0.003	0.0012
ARITH. STD. DEV :	0.020	0.053	0.059	0.062	0.008	0.002	0.0011
GEOM. MEAN :	0.030	0.088	0.051	0.030	0.012	0.002	0.0008
GEOM. STD. DEV. :	1.711	1.779	2.357	2.988	1.789	2.434	2.3985
1ST QUARTILE :	0.023	0.060	0.029	0.016	0.008	0.001	0.0003
2ND QUARTILE :	0.029	0.093	0.050	0.032	0.013	0.002	0.0010
3RD QUARTILE :	0.040	0.134	0.088	0.065	0.017	0.004	0.0015



ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : NORTHWESTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 4,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	49	50	50	50
MAXIMUM :	0.01074	0.0012	0.016	0.00023
MINIMUM :	0.00027	0.0005	0.001	0.00003
RANGE :	0.01047	0.0007	0.015	0.00021
ARITH. MEAN :	0.00071	0.0007	0.004	0.00009
ARITH. STD. DEV :	0.00155	0.0001	0.003	0.00005
GEOM. MEAN :	0.00043	0.0007	0.003	0.00007
GEOM. STD. DEV. :	2.05958	1.1777	1.905	1.93314
1ST QUARTILE :	0.00031	0.0006	0.003	0.00003
2ND QUARTILE :	0.00033	0.0006	0.004	0.00009
3RD QUARTILE :	0.00035	0.0007	0.005	0.00012

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : SOUTHEASTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIUM UG/M**3
# OF SAMPLES :	38	36	36	37	35	33	33
MAXIMUM :	14.91	8.41	9.45	1.04	1.49	1.48	0.55
MINIMUM :	0.68	1.57	1.11	0.12	0.04	0.03	0.02
RANGE :	14.23	6.84	8.34	0.92	1.44	1.45	0.52
ARITH. MEAN :	4.04	3.69	3.30	0.45	0.37	0.49	0.12
ARITH. STD. DEV. :	3.68	1.73	2.04	0.23	0.33	0.42	0.13
GEOM. MEAN :	2.92	3.38	2.81	0.40	0.27	0.32	0.08
GEOM. STD. DEV. :	2.20	1.50	1.75	1.73	2.19	2.76	2.32
1ST QUARTILE :	1.72	2.59	1.84	0.27	0.17	0.16	0.04
2ND QUARTILE :	2.67	3.15	2.67	0.41	0.28	0.30	0.07
3RD QUARTILE :	4.29	3.97	4.33	0.59	0.35	0.68	0.11

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : SOUTHEASTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	36	38	36	36	36	35	36
MAXIMUM :	0.223	1.048	0.200	0.181	0.139	0.024	0.0049
MINIMUM :	0.022	0.041	0.019	0.010	0.014	0.002	0.0003
RANGE :	0.201	1.007	0.180	0.171	0.125	0.022	0.0046
ARITH. MEAN :	0.076	0.227	0.076	0.056	0.055	0.011	0.0023
ARITH. STD. DEV :	0.039	0.241	0.045	0.038	0.026	0.007	0.0011
GEOM. MEAN :	0.069	0.154	0.065	0.044	0.049	0.009	0.0019
GEOM. STD. DEV. :	1.549	2.307	1.761	2.019	1.696	2.086	1.8649
1ST QUARTILE :	0.053	0.081	0.043	0.029	0.035	0.004	0.0014
2ND QUARTILE :	0.065	0.135	0.065	0.043	0.053	0.009	0.0019
3RD QUARTILE :	0.086	0.223	0.086	0.080	0.075	0.018	0.0030

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

-----

STATION NAME : SOUTHEASTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 3,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	36	37	36	36
MAXIMUM :	0.00447	0.0162	0.052	0.00089
MINIMUM :	0.00022	0.0004	0.005	0.00002
RANGE :	0.00425	0.0158	0.047	0.00087
ARITH. MEAN :	0.00096	0.0034	0.020	0.00035
ARITH. STD. DEV :	0.00113	0.0043	0.011	0.00017
GEOM. MEAN :	0.00059	0.0016	0.017	0.00030
GEOM. STD. DEV. :	2.52272	3.2870	1.797	2.05449
1ST QUARTILE :	0.00030	0.0006	0.010	0.00024
2ND QUARTILE :	0.00037	0.0009	0.016	0.00032
3RD QUARTILE :	0.00115	0.0045	0.027	0.00045

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 11,84

PAGE : 1

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL SULPHUR UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3
# OF SAMPLES :	53	47	47	49	49	53	53
MAXIMUM :	34.00	9.67	16.56	1.84	1.09	2.11	0.44
MINIMUM :	2.01	2.28	1.77	0.32	0.14	0.06	0.02
RANGE :	31.99	7.39	14.80	1.52	0.95	2.05	0.42
ARITH. MEAN :	10.28	5.34	6.77	0.93	0.47	0.68	0.15
ARITH. STD. DEV :	7.50	2.04	3.61	0.31	0.18	0.42	0.10
GEOM. MEAN :	7.93	4.97	5.88	0.88	0.43	0.55	0.12
GEOM. STD. DEV. :	2.10	1.48	1.73	1.43	1.49	1.99	1.99
1ST QUARTILE :	4.17	3.68	3.59	0.70	0.33	0.40	0.08
2ND QUARTILE :	8.85	4.87	6.33	0.92	0.44	0.59	0.13
3RD QUARTILE :	13.13	6.84	8.55	1.09	0.55	0.85	0.19

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 11,84

PAGE : 2

	POTASSIM	SODIUM	IRON	ALUMINUM	LEAD	MANGANSE	COPPER
	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	53	48	53	53	53	53	53
MAXIMUM :	0.119	0.323	0.231	0.221	0.110	0.016	0.0055
MINIMUM :	0.028	0.048	0.023	0.015	0.017	0.002	0.0003
RANGE :	0.091	0.275	0.208	0.207	0.093	0.014	0.0052
ARITH. MEAN :	0.071	0.135	0.089	0.068	0.057	0.007	0.0022
ARITH. STD. DEV :	0.024	0.069	0.043	0.043	0.019	0.003	0.0009
GEOM. MEAN :	0.067	0.120	0.080	0.056	0.053	0.007	0.0019
GEOM. STD. DEV. :	1.416	1.611	1.610	1.888	1.441	1.679	1.6618
1ST QUARTILE :	0.050	0.086	0.059	0.036	0.041	0.005	0.0016
2ND QUARTILE :	0.068	0.109	0.083	0.062	0.058	0.007	0.0021
3RD QUARTILE :	0.085	0.188	0.108	0.081	0.067	0.010	0.0026

ONTARIO MINISTRY OF THE ENVIRONMENT  
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS  
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

---

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE/LO-VOL

PERIOD OF REPORT : JAN 4,83 TO JAN 11,84

PAGE : 3

	NICKEL	VANADIUM	ZINC	CADMIUM
	UG/M**3	UG/M**3	UG/M**3	UG/M**3
# OF SAMPLES :	53	53	53	52
MAXIMUM :	0.00457	0.0031	0.070	0.00094
MINIMUM :	0.00026	0.0005	0.008	0.00003
RANGE :	0.00431	0.0026	0.062	0.00091
ARITH. MEAN :	0.00066	0.0009	0.025	0.00036
ARITH. STD. DEV :	0.00075	0.0005	0.012	0.00017
GEOM. MEAN :	0.00048	0.0008	0.022	0.00031
GEOM. STD. DEV. :	1.99451	1.5011	1.598	1.93126
1ST QUARTILE :	0.00031	0.0006	0.014	0.00025
2ND QUARTILE :	0.00033	0.0007	0.024	0.00034
3RD QUARTILE :	0.00043	0.0008	0.030	0.00047



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